

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An originality guarantee system, comprising:

_____ an embedded information apparatus which embeds information into a plurality of structural data

_____ comprises:

_____ and includes a including:

_____ a first data standardization device that sorts the plurality of structural data on the basis of a first rule,

_____ a first message digest generation device that calculates a message digest with a predetermined hash function, for a bit stream composed of the plurality of structural data sorted by the first data standardization device, and

_____ a first data transformation device that sorts the plurality of structural data sorted by the ~~device~~ first data standardization device; on the basis of a second rule that is different from the first rule, with a key being the message digest calculated by ~~said~~ the first message digest generation device; and

_____ an information alteration detection apparatus which detects any alteration of the plurality of structural data with the information that is embedded by the embedded information apparatus including:

_____ a second data standardization device that sorts a plurality of structural data on the basis of the first rule,

_____ a second message digest generation device that calculates a message digest with the hash function, for a bit stream composed of the plurality of structural data that is sorted by ~~said~~ the second data standardization device,

_____ a second data transformation device that sorts the plurality of structural data sorted by ~~said the second~~ data standardization device on the basis of the second rule, with a key being the message digest calculated by ~~said the second~~ message digest generation device; and

_____ a decision device that:

_____ compares the plurality of structural data, which is sorted by ~~said the second~~ data transformation device, with the plurality of structural data before being sorted by ~~said the second~~ data standardization device, ~~and that~~

_____ decides the plurality of structural data, before being sorted by ~~said the second~~ data standardization device, have not been altered when both of the structural data match, and

_____ decides the plurality of structural data, before being sorted by ~~said the second~~ data standardization ~~means~~ device, have been altered when both of the structural data do not match.

2. (Canceled)

3. (Currently Amended) An information alteration detection apparatus, comprising:

_____ a second data standardization device that sorts a plurality of structural data on the basis of a first rule being the same as that of a data standardization device of an embedded information apparatus;

_____ a second message digest generation device that calculates a message digest with a predetermined hash function, for a bit stream composed of the plurality of structural data sorted by ~~said the second~~ data standardization device;

_____ a second data transformation device that sorts the plurality of structural data sorted by ~~said the second~~ data standardization device, on the basis of a second rule ~~being~~ that is different from the first rule and is the same as that of data transformation device of the embedded information apparatus, with a key being the message digest calculated by ~~said the second~~ message digest generation device; and

_____ a decision device that:
 _____ compares the plurality of structural data sorted by ~~said the second~~ data transformation device with the plurality of structural data before being sorted by ~~said the second~~ data standardization device, ~~and that~~
 _____ decides the plurality of structural data, before being sorted by ~~said the second~~ data standardization device, have not been altered when both of the structural data match, and
 _____ decides the plurality of structural data, before being sorted by ~~said the second~~ data standardization device, have been altered when both of the structural data do not match.

4. (Currently Amended) An embedded information and information alteration detection method, comprising:

_____ sorting a plurality of structural data on the basis of a first rule;
 _____ calculating a message digest with a predetermined hash function, for a bit stream composed of the plurality of sorted structural data; ~~and~~
 _____ sorting the plurality of sorted structural data on the basis of a second rule that is different from the first rule by using the calculated message digest as a key; and
 _____ comparing the plurality of structural data, which is sorted on the basis of the second rule, with the plurality of structural data, before being sorted on the basis of the first rule, and deciding the plurality of structural data, before being sorted on the basis of the first

rule, have not been altered when both of the structural data match, and deciding the plurality of structural data, before being sorted on the basis of the first rule, have been altered when both of the structural data do not match..

5. (Canceled)

6. (Currently Amended) A computer-readable record medium being executable that stores and executes an embedded information and information alteration detection program on a computer, comprising:

_____ sorting a plurality of structural data on the basis of a first rule;

_____ calculating a message digest with a predetermined hash function, for a bit stream composed of the plurality of sorted structural data; ~~and~~

_____ sorting the plurality of sorted structural data on the basis of a second rule that is different from the first rule by using the calculated message digest as a key; and

_____ comparing the plurality of structural data, which is sorted on the basis of the second rule, with the plurality of structural data, before being sorted on the basis of the first rule, and deciding the plurality of structural data, before being sorted on the basis of the first rule, have not been altered when both of the structural data match, and deciding the plurality of structural data, before being sorted on the basis of the first rule, have been altered when both of the structural data do not match.

7. (Canceled)